

NBA 450

SOFTENING POINT TESTER RING AND BALL METHOD



STANDARDS

ASTM D 36, ASTM E28, IP 58, EN ISO 1427, DIN 52011, AASHTO T53 and related methods.

SCOPE

ASTM D36

This test method covers the determination of the softening point of bitumen in the range from 30 to 157°C using the ring-and-ball apparatus immersed in distilled water, silicone or glycerin.

ASTM E28

These test methods are intended for determining the softening point of resins and similar materials by means of the ring and ball apparatus.



«FULLY AUTOMATIC
MODEL FOR RELIABLE
MEASUREMENTS»

TECHNICAL FEATURES

- 4 preset methods (water, glycol, glycerin, silicon oil)
- Test temperature range: up to 200°C
- Automatic detection by optical cells barrier
- Adjustable heating rate and stirring speeds
- Capacitive color touch screen 8,4"
- Stainless steel tray for easy handling of accessories
- Easy positioning of the beaker in the heating block
- Optimized centering system
- Easy handling of the ball with the magnetic ball dropper
- Quick cooling by fan at the end of the test
- Small footprint - Compact instrument



*Photos are non-contractual - they may differ from actual products.

CONNECTIVITY

- 3 rear USB ports
- 1 front USB port
- 1 LAN port
- 1 RS232C port

SAFETY



- User access with different levels
- Sample overheating protection
- Audible and visual alarms
- Automatic shut off if missing probe
- Waterproof heater
- Solvent proof display screen

SOFTWARE



- Backup and software update by USB
- Keyboard, mouse, barcode reader and printer connection
- Data storage - 320 Go HDD
- Data export through USB, LIMS, PDF or e-mails.
- Fully settable report
- Friendly software interface
- User and password settings
- Data transfer to printer
- Product files configuration



Magnetic ball dropper - P/N 60705



Mechanical stirrer



Magnetic stirrer

ACCESSORIES

- Magnetic Ball Dropper
- Mechanical and magnetic stirrers
- Removal magnetic stick for magnetic stirrer
- Optional : different types of rings
- ASTM D 36 or ISO EN 1427 beaker
- Molding plate
- Ball centering guide
- Optional Printer
- Optional ASTM E28 beaker with specific treatment

SCOPE OF DELIVERY

NBA 450 is a reliable and resistant instrument dedicated to automatic softening point detection. Quick and easy operation through integrated touchscreen.

60700

NBA 450 is delivered ready to use with:

- 2 standardized beakers (P/N 17487)
- 10 shouldered rings (P/N 20765)
- 10 balls (P/N 20766)
- 1 holder (P/N 60703)
- 1 Pt 100 probe (P/N 40139)
- 1 mechanical stirrer (P/N 60702)
- 1 magnetic stirrer (P/N 60708)
- 1 removal magnetic stick (P/N 20030)
- 1 magnetic ball dropper (P/N 60705)
- 2 centering guides (P/N 60704)
- 1 molding plate (P/N 60706)

Site requirements:

- Power supply: AC 200-250 V, 50/60 Hz - 3.3 A
- Dimension: (D) 580x (W) 290x (H) 380 mm
- Weight: 14,8 kg

SUMMARY

| | | | |
|--------------------------------|----------------|------------------------|---------------|
| Operating temperature | +5 to + 30 ° C | Detection | Optical |
| Temperature range | Up to 200 ° C | Stirring speeds | Up to 250 rpm |
| Temperature unit | °C or °F | Cooling system | By fan |
| Temperature measurement | Pt 100 Probe | Data Storage | 320 Go HDD |



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